

Notice of Allowability

Application No.

10/661,270

Applicant(s)

BODIN ET AL.

Examiner

VAN H. NGUYEN

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicant's amendments and arguments filed 02/08/2007.
2. ☒ The allowed claim(s) is/are 22-25, 27-30, and 32-35 (now renumbered as 1-12).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

1. This communication is responsive to the Amendments filed 02/08/2007.

Claims 22-25, 27-30, and 32-35 are pending in this application. With this Examiner's amendment: claims 22, 27, and 32 have been amended; and claims 26, 31, and 36 have been cancelled.

2. **EXAMINER'S AMENDMENT:**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Wayne P. Bailey (Reg. No. 34, 289) on 04/26/2007.

The application has been amended as follows:

In the Claims:

- (a) All previous copies of claims 22, 27, and 32 have been replaced with the following clean copy of claims 22, 27, and 32 as amended by the Examiner's amendment:

Claim 22. A device driver, in a computer readable storage medium and functionally operable in conjunction with a data processing system, suitable for communication with a plurality of different types of devices when functionally operated in conjunction with the data processing system, wherein each of the plurality of different types of devices conform to a common standard, the device driver comprising:

identification means for identifying all input/output ports relating to a basic device type common to the plurality of different types of devices;

interrogation means using commands conforming to the standard and common to the plurality of different types of devices for polling a device within the plurality of different types of devices to obtain input/output ports used by the device in addition to the input/output ports identified by the identification means; and

trapping means for trapping input/output ports identified by the identification means and the interrogation means;

wherein additional input/output ports used by the basic device type are identifiable during installation by the device as removed from the basic device type and unused by the device through a user option.

Claim 27. A method in a computer used by a device driver for communication with a plurality of different types of devices, wherein each of the plurality of different types of devices conform to a common standard, the method comprising computer implemented steps of:

identifying all input/output ports relating to a basic device type common to the plurality of different types of devices;

polling a device within the plurality of different types of devices, using commands conforming to the standard and common to the plurality of different types of devices, to obtain input/output ports used by the device in addition to the input/output ports identified by the identifying step; and

trapping input/output ports identified by the identifying step and the polling step;

wherein additional input/output ports used by the basic device type are identifiable during installation by the device as removed from the basic device type and unused by the device through a user option.

Claim 32. A system for communication with a plurality of different types of devices, wherein each of the plurality of different types of devices conform to a common standard, the system comprising:

a processor;

a memory connected to the processor;

identification means for identifying all input/output ports relating to a basic device type common to the plurality of different types of devices;

interrogation means using commands conforming to the standard and common to the plurality of different types of devices for polling a device within the plurality of different types of devices to obtain input/output ports used by the device in addition to the input/output ports identified by the identification means; and

trapping means for trapping input/output ports identified by the identification means and the interrogation means;

wherein additional input/output ports used by the basic device type are identifiable during installation by the device as removed from the basic device type and unused by the device through a user option.

(b) Claims 26, 31, and 36 have been cancelled.

3. **REASONS FOR ALLOWANCE:**

Claims 22-25, 27-30, and 32-35 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art does not expressly teach or render obvious the invention as recited in independent claims 22, 27, and 32.

The features as recited in independent claims 22, 27, and 32 *"using commands conforming to the standard and common to the plurality of different types of devices for polling a device within the plurality of different types of devices to obtain input/output ports used by the device in addition to the input/output ports identified by the identification means; wherein additional input/output ports used by the basic device type are identifiable during installation by the device as removed from the basic device type and unused by the device through a user option"*, when taken in the context of the claims as a whole, was not uncovered in the prior art teachings.

Nor were references uncovered that would have provided a basis of evidence for asserting a motivation that one of ordinary skill level in the art at the time the invention was made, knowing of *a method used by a device driver for communication with a plurality of different types of devices* in this specific environment, would have

integrated or modified to teach *the method in a computer used by a device driver for communication with a plurality of different types of devices, wherein trapping means that traps ports identified using two different mechanisms (identification means and interrogation means)* including the specific features as recited in the context of independent claims 22, 27, and 32.

Dependent claims are allowed as they depend upon allowable independent claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. **ADDITIONAL REFERENCES**

The Examiner as of general interest cites the following references:

U.S. Pat. No. 6,141,706

U.S. Pat. No. 6,112,260

U.S. Pat. No. 5,590,342

U.S. Pat. No. 5,543,822

Art Unit: 2194

CONTACT INFORMATION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H. NGUYEN whose telephone number is (571) 272-3765. The examiner can normally be reached on Monday-Thursday from 8:30AM - 6:00PM. The examiner can also be reached on alternative Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM THOMSON can be reached at (571) 272-3718.

The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Commissioner for patents
P O Box 1450
Alexandria, VA 22313-1450



Van H. Nguyen
Primary Examiner
Technology Center 2100